

Attorney Docket No.: CW-01-040130

This listing of claims replaces all prior versions, and listings of claims in the application:

LISTING OF THE CLAIMS

Claim 1 (currently amended): An apparatus, comprising:

a light module, comprising:

a first light emitting diode ("LED") having a first set of electrical characteristics; and

a second LED-light emitting diode connected to the said first LED-light emitting diode in parallel and with such that said first light emitting diode and said second light emitting diode have the same polarity, said second light emitting diode having a second set of electrical characteristics that are different from said first set of electrical characteristics, such that said first light emitting diode carries substantially all of the current that is conducted through said light module, while said second light emitting diode remains unused until said first light emitting diode fails to conduct said current.

Claim 2 (currently amended): An apparatus as claimed in claim 1, wherein at least one of the said first LED-light emitting diode and the said second LED-light emitting diode has a maximum total current rating sufficient to carry all of said current conducted through the said light module but are not selected to have different electrical characteristics.

Claim 3 (canceled without prejudice)

Claim 4 (canceled without prejudice)

Claim 5 (currently amended): An apparatus as claimed in claim 4, wherein the said first and said second LEDs-light emitting diodes have substantially the same forward voltage drop over the operating range of the said light module.

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Claim 6 (currently amended): An apparatus as claimed in claim 5, further comprising a heat sink thermally connected to both the said first and said second LEDs light emitting diodes.

Claim 7 (currently amended): An apparatus as claimed in claim 2, further comprising a light-diffuser covering the said first and said second LEDs light emitting diodes.

Claim 8 (currently amended): An apparatus as claimed in claim 2, wherein the said light module further comprising comprises:

a third LED light emitting diode that is connected to the said first and said second LEDs light emitting diodes, in parallel, but with opposite polarity; and

a fourth LED light emitting diode that is connected to the said first and said second LEDs light emitting diodes, in parallel, but with opposite polarity.

Claim 9 (currently amended): An apparatus as claimed in claim 2 1, further comprising a plurality of additional light modules as claimed in claim 2 1, connected together in series and connected to the said light module in series.

Claim 10 (currently amended): An apparatus as claimed in claim 9, wherein the number of said plurality of additional light modules and said light module that are connected together in series is selected such that the sum of the minimum operating voltage ~~for~~ ~~of~~ each of the said plurality of additional light modules and said light modules is less than or equal to the voltage available to supply the said apparatus.

Claim 11 (currently amended): An apparatus as claimed in claim 10, wherein the minimum operating voltage of a light module is the greater of the minimum operating voltage of the said first LED light emitting diode and the minimum operating voltage of the said second LED light emitting diode.

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Claim 12 (currently amended): An apparatus as claimed in claim 10, wherein the said number of light modules that are connected together in series is selected such that the sum of the maximum operating voltage for each of the light modules is greater than or equal to the said voltage available to supply the said apparatus.

Claim 13 (currently amended): An apparatus as claimed in claim 12, wherein the maximum operating voltage of a light module is the lesser of the maximum operating voltage of the said first LED light emitting diode and the maximum operating voltage of the said second LED light emitting diode.

Claim 14 (currently amended): An apparatus as claimed in claim 12, further comprising means for limiting the said current flowing through the light module.

Claim 15 (currently amended): An apparatus as claimed in claim 14, wherein the said means for limiting current comprises a resistor connected in series with the said light module.

Claim 16 (currently amended): An apparatus, comprising:

a light module, comprising:

a first polarized photon-emitting semiconductor device (“PPESD”) having a first set of electrical characteristics; and

a second PPESD photon-emitting semiconductor device connected to the said first PPESD photon-emitting semiconductor device in parallel and with such that said first polarized photon-emitting semiconductor device and said second polarized photon-emitting semi-conductor device have the same polarity, said second polarized photon-emitting semiconductor having a second set of electrical characteristics that are different from said first set of electrical characteristics, such that said first polarized photon-emitting semiconductor device carries all of the current that is conducted through said light module, while said second

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polarized photon-emitting semiconductor device remains unused until said first polarized photon-emitting semiconductor device fails to conduct said current.

Claim 17 (currently admitted): An apparatus as claimed in claim 16, wherein at least one of the said first PPESD photon-emitting semiconductor device and the said second PPESD photon-emitting semiconductor device has a maximum total current rating sufficient to carry all current conducted through the said light module, but are not selected to have different electrical characteristics.

Claim 18 (cancelled without prejudice)

Claim 19 (currently amended): An apparatus as claimed in claim 17, wherein the said first and said second PPESDs photon-emitting semiconductor device have substantially the same forward voltage drop over the operating range of the said light module.

Claim 20 (currently amended): A method, of forming a light module comprising:
-connecting providing a first light emitting diode that has a first set of electrical characteristics; ("LED") and
connecting a second LED together light emitting diode to said first light emitting diode in parallel and with such that said first light emitting diode and said second light emitting diode have the same polarity, said second light emitting diode having a second set of electrical characteristics that are different from said first set of electrical characteristics, such that said first light emitting diode carries substantially all of the current that is conducted through said light module, while said second light emitting diode remains unused until said first light emitting diode fails to conduct said current.

Claims 21 (new): The method of claim 20 wherein at least one of said first light emitting diode and said second light emitting diode have a maximum total current rating sufficient to carry all current conducted through said module, but are not selected to have different electrical characteristics.